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EXAMINER

FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,703

Applicant(s)

HOLMES, ERIC

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 30-49 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,9,44 and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,30-43 and 45-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 21, 2006 has been entered.

Election/Restrictions

2. Claims 5,6,9,44 and 49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 6, 2005.

Claim Objections

3. Claims 1,30,36,39 and 41-43 are objected to because of the following informalities:

Claim 1 (line 10) recites "end edge to said pivot pin opening edge". It should recite --end edge surface to said opposite end edge surface--.

Claim 30 (line 11) recites "molded material molded". It should recite --a molded material part comprising molded material molded--.

Claim 30 (line 15) recites "said groove surface". It should recite --said groove--.

Claim 30 (line 17) recites "at least a of the". It should recite --at least a portion of the--.

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Claim 30 (line 18) recites "the groove surface". It should recite --the groove--.

Claim 36 (line 4) recites "said groove surface". It should recite --said groove--.

Claim 39 (line 5) recites "area region integral". It should recite --area regions integral--.

Claim 41 (line 8) recites "top end edge to said pivot pin opening edge". It should recite --top end edge surface to said pivot pin opening edge surface--.

Claim 41 (line 11) recites "bearing shell surface". It should recite --bearing shell portion--.

Claim 41 (line 12) recites "groove surface". It should recite --groove--.

Claim 41 (line 13) recites "said groove surface". It should recite --said groove--.

Claim 41 (line 14) recites said pivot pin opening edge". It should recite --said pivot pin opening edge surface--.

Claim 42 (line 3) recites "said housing". It should recite --said housing part--.

Claim 42 (line 3) recites "in said for receiving bellows". It should recite --in said bellows--.

Claim 43 (line 4) recites "area region integral". It should recite --area regions integral--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 (lines 16) recites "said bottom end annular surface or said outer surface adjacent thereto being adjacent to or arranged in or backing at least a --portion-- of the molded material of the groove". It is unclear as to how the bottom end annular surface or the outer surface adjacent thereto can be arranged in the molded material of the groove.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4,7,8,30-43 and 45-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Schutt et al. (US 5,611,635).

As to claim 1, Schutt et al. disclose a ball-and-socket joint capable of use with motor vehicles, the ball-and-socket joint comprising:

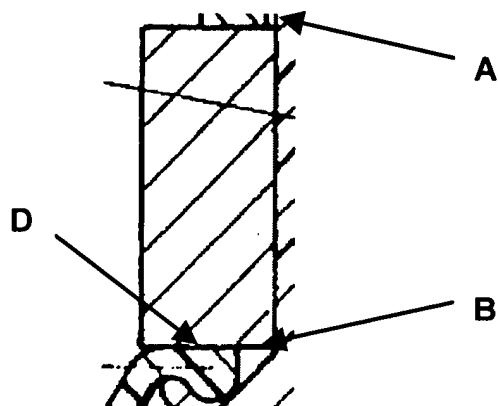
a joint ball **2a** and a pivot pin **2d**;

a housing part **1** formed of a shaped metal tube and formed with a top end edge surface **A** (Figure 1 reprinted below with annotations) defining an opening and an opposite end surface **B** defining a pivot pin opening, the housing part having an outer peripheral surface (defined by top, bottom and side cylindrical surfaces of housing part

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1) at an outside of the housing part extending from the top end edge surface to the opposite end edge surface and having an inner peripheral surface 1a at an inside of the housing part opposite the outer peripheral surface, the inner peripheral surface extending from the top end edge surface to the opposite end edge surface; and

molded material 3 disposed on the housing part outer surface to form an outer molded material functional surface on the outer peripheral surface (on the bottom cylindrical surface of housing part 1; the outer peripheral surface being defined by top, bottom and side cylindrical surfaces of housing part 1) and opposite the inner peripheral surface and molded on the inner peripheral 1a to form an inner molded material functional surface on the inner peripheral surface and opposite the outer peripheral surface (Figures 1 and 2).

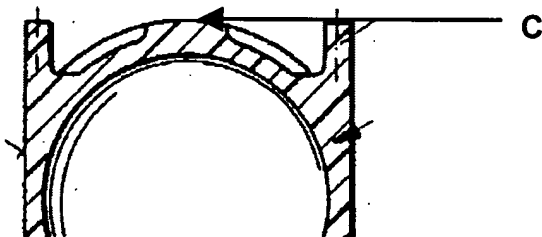


The applicant is reminded that patentability determination of product-by-process claims is based on the product itself, even though such claims are limited and defined by the process. See MPEP § 2113. "The patentability of a product does not depend on its method of production." In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

As to claim 2, Schutt et al. disclose a ball-and-socket joint wherein the functional surfaces include a bearing shell portion **3b** forming a part of a bearing shell surface on the inside **1a** of the housing part **1** and a bellows seat surface contour **3e,D** on an outside of the housing part (Figure 1).

As to claim 3, Schutt et al. disclose a ball-and-socket joint wherein the bearing shell portion **3b** forms an entire bearing shell surface in contact with substantially all of a bearing surface of the joint ball **2a** (Figure 1).

As to claim 4, Schutt et al. disclose a ball-and-socket joint wherein the bearing shell surface **3b** includes extension segments **3d,C** (Figure 1 reprinted below with annotations) integral with the bearing shell surface and extending from a region of the bearing shell surface disposed on the housing part **1**, the extension segments being molded to a shape to form a joint ball end region bearing surface (Figure 1).



As to claim 7, Schutt et al. disclose a ball-and-socket joint comprising an end cap **4** wherein the housing part **1** is formed as a shaped metal tube with the top end having an opening and the end cap closes the opening (Figure 1).

As to claim 8, Schutt et al. disclose a ball-and-socket joint wherein the functional surfaces on each of the inside **1a** and the outside of the housing part **1** are formed of one molded part wrapping around an edge of the housing part (Figure 1).

As to claim 30, Schutt et al. disclose a ball-and-socket joint for motor vehicles, the ball-and-socket joint comprising:

a joint ball **2a** and a pivot pin **2d**;

a housing part **1** formed of a shaped metal tube and formed with a top end annular surface **A** defining an opening and an opposite end with a bottom end annular surface **B** defining a pivot pin opening, the housing part having an outer annular peripheral surface (defined by top, bottom and side cylindrical surfaces of housing part **1**) at an outer end of the housing part extending from the top end annular surface to the bottom end annular surface and having an inner peripheral surface **1a** at an inside of the housing part extending from the top end annular surface to the bottom end annular surface; and

a molded material part **3** comprising molded material disposed on the housing part outer peripheral surface forming a functional surface with a groove **3e,D** and molded material molded on the housing part inner peripheral surface forming a functional surface, the groove being in a molded material part region with the bottom end annular surface or the outer surface adjacent thereto being adjacent to or backing at least a portion of the molded material of the groove (Figures 1 and 2).

The applicant is reminded that patentability determination of product-by-process claims is based on the product itself, even though such claims are limited and defined by the process. See MPEP § 2113. "The patentability of a product does not depend on its method of production. " In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

As to claim 31, Schutt et al. disclose a ball-and-socket joint wherein the bottom end annular surface **B** is covered by the molded material part **3** with the molded material part extending outwardly therefrom and outwardly from the adjacent outer peripheral surface and inner peripheral surface **1a** of the housing part **1** (Figure 1).

As to claim 32, Schutt et al. disclose a ball-and-socket joint wherein the groove **3e,D** is partially defined by a portion **D** of the housing part **1** adjacent to the bottom end annular surface **B**, with the groove having a curve along an axial extent (of molded material part **3**) thereof (Figure 1).

As to claim 33, Schutt et al. disclose a ball-and-socket joint wherein the groove **3e,D** is annular extending around the housing part **1** (Figure 1).

As to claim 34, Schutt et al. disclose a ball-and-socket joint wherein the molded material part **3** is an integral single piece (Figure 2).

As to claim 35, Schutt et al. disclose a ball-and-socket joint wherein the groove **3e,D** is partially defined by a curve (annular surface of) in a portion **D** of the housing part **1** adjacent to the bottom end annular surface **B** with the groove having a curve along an axial extent (of molded material part **3**) thereof (Figure 1).

As to claim 36, Schutt et al. disclose a ball-and-socket joint wherein the housing part **1** is covered by the molded material part **3** disposed on the inner surface to form a part of a joint ball pivot bearing surface **3b** on the inside of the housing part and on the housing part outer surface to form the groove **3e,D** (Figure 1).

The applicant is reminded that patentability determination of product-by-process claims is based on the product itself, even though such claims are limited and defined

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by the process. See MPEP § 2113. "The patentability of a product does not depend on its method of production. " In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

As to claim 37, Schutt et al. disclose a ball-and-socket joint wherein the molded material of the molded material part **3** is arranged on the inner surface **1a** to form a part of a joint ball pivot bearing surface **3b** on the inside of the housing part **1** and on the housing part outer surface to form a groove surface **3e,D** (Figure 1).

As to claim 38, Schutt et al. disclose a ball-and-socket joint wherein the bottom end annular surface **B** is covered by the molded material part **3** with the molded material part extending outwardly therefrom and outwardly from the adjacent outer peripheral surface and inner peripheral surface **1a** of the housing part **1** (Figure 1).

As to claim 39, Schutt et al. disclose a ball-and-socket joint wherein the molded material of the molded material part **3** is arranged on the inner surface **1a** to form a part of a joint ball bearing shell portion **3b** on the inside of the housing part **1** and on the housing part outer surface to form a groove surface **3e,D** wherein the bearing shell portion includes extension segments **3d,C** with adjacent folded area regions integral with the bearing shell portion and extending from a region of the bearing shell portion molded on the housing part, the extension segments being molded to a shape to form a joint ball end region bearing surface (Figures 1 and 2).

As to claim 40, Schutt et al. disclose a ball-and-socket joint wherein the molded material part **3** is an integral single piece (Figure 1).

As to claim 41, Schutt et al. disclose a ball-and-socket joint for motor vehicles, the ball-and-socket joint comprising:

a joint ball **2a** and a pivot pin **2d**;

a housing part **1** formed of a shaped metal tube and formed with a top end edge surface **A** with a top opening and an opposite end with a pivot pin opening having a pivot pin opening edge surface **B**, the housing part having an outer surface (defined by top, bottom and side cylindrical surfaces of housing part **1**) at an outside of the housing part extending from the top end edge surface to the pivot pin opening edge surface and having an inner surface **1a** at an inside of the housing part extending from the top end edge surface to the pivot pin opening edge surface; and

molded material part **3** disposed on the housing part inner surface to form a part of a joint ball pivot bearing shell portion on the inside of the housing part and the molded material disposed on the housing part outer surface to form a groove **3e,D** directly outwardly and opposite the housing part inner surface, the groove being defined by a curved portion (annular surface **D** of) of the housing part adjacent to the pivot pin opening edge surface, cooperating with the molded material on the housing part outer surface (Figures 1 and 2).

The applicant is reminded that patentability determination of product-by-process claims is based on the product itself, even though such claims are limited and defined by the process. See MPEP § 2113. "The patentability of a product does not depend on its method of production. " In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

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As to claim 42, Schutt et al. disclose a ball-and-socket joint comprising a bellows seal **5**, wherein the groove **3e,D** is a bellows seat surface contour on an outside of the housing part **1**, the bellows seal having a portion seated in the bellows seat surface contour (Figure 1).

As to claim 43, Schutt et al. discloses a ball-and-socket joint wherein the molded material of the molded material part **3** is arranged on the inner surface **1a** to form the joint ball bearing shell portion **3b** on the inside of the housing part **1** wherein the bearing shell portion includes extension segments **3d,C** with adjacent fold area regions integral with the bearing shell portion and extending from a region of the bearing shell portion molded on the housing part, the extension segments being molded to a shape to form a joint ball end region bearing surface wherein the bearing shell portion and the joint ball end region bearing surface forms the entire bearing shell (Figures 1 and 2).

As to claim 45, Schutt et al. disclose a ball-and-socket joint comprising an end cap **4** connected to the housing part **1** at the top end edge surface **A**, the end cap closing the top opening (Figure 1).

As to claim 46, Schutt et al. disclose a ball-and-socket joint wherein the groove **3e,D** is annular extending around the housing part **1** (Figure 1).

As to claim 47, Schutt et al. disclose a ball-and-socket joint wherein the molded material part **3** is an integral single piece.

As to claim 48, Schutt et al. disclose a ball-and-socket joint wherein the molded material part **3** wraps around the pivot pin opening edge surface **B** of the housing part **1** (Figure 1).

Response to Arguments

8. Applicant's arguments filed February 21, 2205 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

Schutt et al. do not disclose a ball-and-socket joint comprising molded material disposed on the housing part outer surface to form an outer molded material functional surface on the outer peripheral surface and *opposite the inner peripheral surface* and molded on the inner peripheral to form an inner molded material functional surface on the inner peripheral surface and *opposite the outer peripheral surface*.

As to claim 1, Schutt et al. disclose a ball-and-socket joint comprising molded material 3 disposed on the housing part 1 outer surface to form an outer molded material functional surface on the outer peripheral surface (on the bottom cylindrical surface of housing part 1; the outer peripheral surface being defined by top, bottom and side cylindrical surfaces of housing part 1) and opposite the inner peripheral surface 1a and molded on the inner peripheral to form an inner molded material functional surface on the inner peripheral surface and opposite the outer peripheral surface (Figures 1 and 2).

As to claim 30, Attorney argues that:

Schutt et al. do not disclose a ball-and-socket joint wherein the groove is in a molded material part region *with the bottom end annular surface or the outer*

surface adjacent thereto being adjacent to or backing at least a portion of the molded material of the groove.

Examiner disagrees. As to claim 30, Schutt et al. disclose a ball-and-socket joint wherein the groove **3e,D** is in a molded material part region with the bottom end annular surface **B** or the outer surface adjacent thereto being adjacent to or backing at least a portion of the molded material **3** of the groove (Figures 1 and 2).

As to claim 41, Attorney argues that:

Schutt et al. do not disclose a ball-and-socket joint wherein the molded material is disposed on the housing part outer surface to form a groove *directly outwardly and opposite the housing part inner surface*.

Examiner disagrees. As to claim 41, Schutt et al. disclose a ball-and-socket joint wherein the molded material **3** is disposed on the housing part **1** outer surface to form a groove **3e,D** directly outwardly and opposite the housing part inner surface **1a** (Figures 1 and 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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